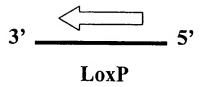
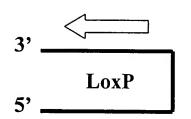
Tile. IN VITRO AMPLIFICATION OF NUCLEIC ACID
MOLECULES VIA CIRCULAR REPLICONS
Inventor: Jeffrey I. Auerbach
Express Mail No.: EV334229453US
Atty Docket No. INL-083CP6C5
Atty: Diana M. Steel
Figure 1 of 19





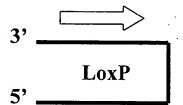
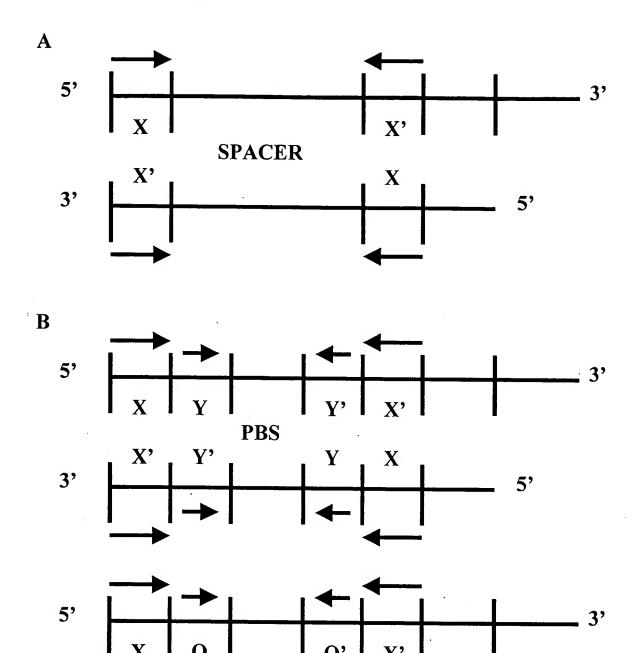


FIG. 1

Title: IN VITRO AMPLIFICATION OF NUCLEIC ACID MOLECULES VIA CIRCULAR REPLICONS Inventor: Jeffrey I. Auerbach Express Mail No.: EV334229453US Atty Docket No. INL-083CP6C5 Atty: Diana M. Steel Figure 2 of 19



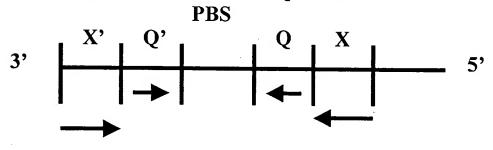


FIG. 2A

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Figure 3 of 19

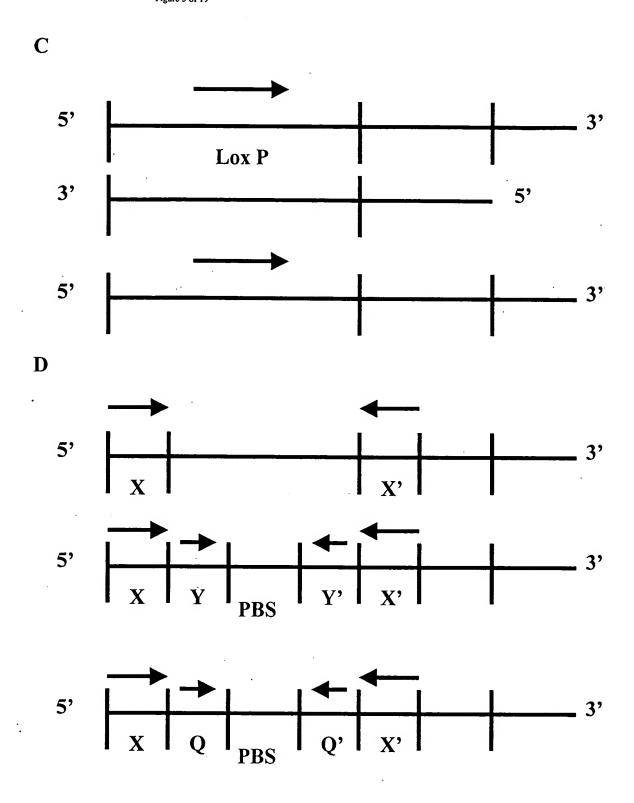
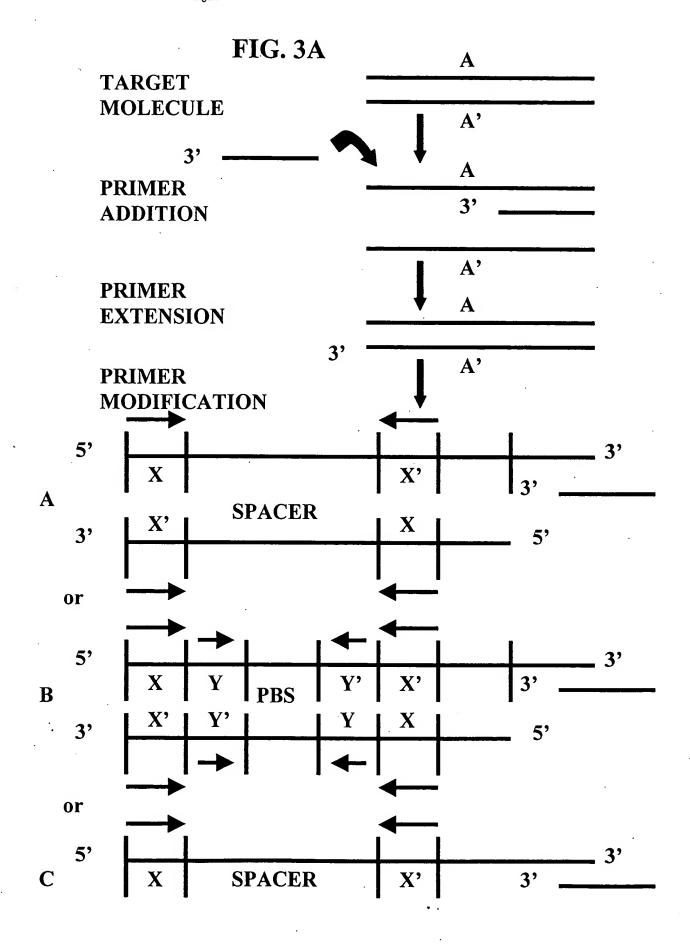


FIG. 2B

Title: IN VITRO AMPLIFICATION OF NUCLEIC ACID MOLECULES VIA CIRCULAR REPLICONS Inventor: Jeffrey I. Auerbach

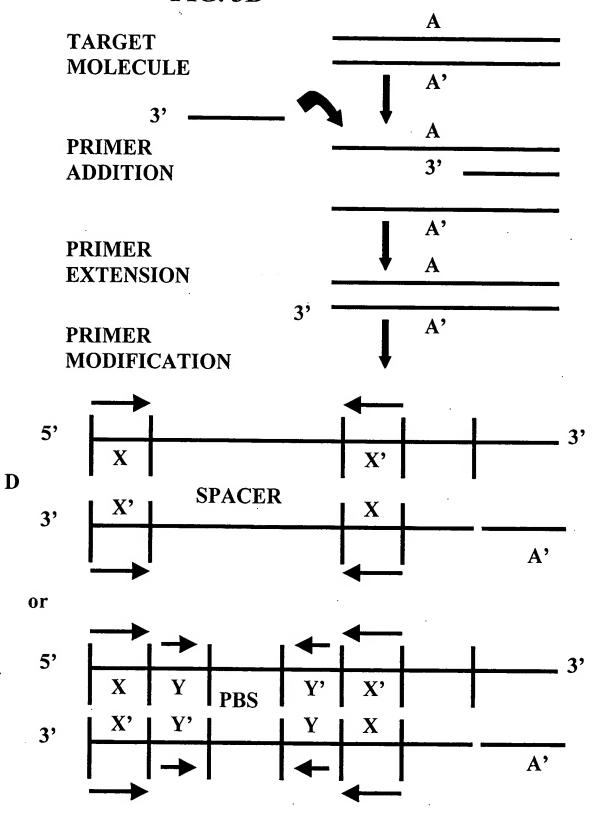
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Atty: Diana M. Steel
Figure 4 of 19



Tule: IN VITRO AMPLIFICATION OF NUCLEIC ACID MOLECULES VIA CIRCULAR REPLICONS Inventor: Jeffrey I. Auerbach Express Mail No.: EV334229453US Atty Docket No. INL-083CP6C5 Atty: Diana M. Steel

## FIG. 3B

Figure 5 of 19



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Figure 6 of 19

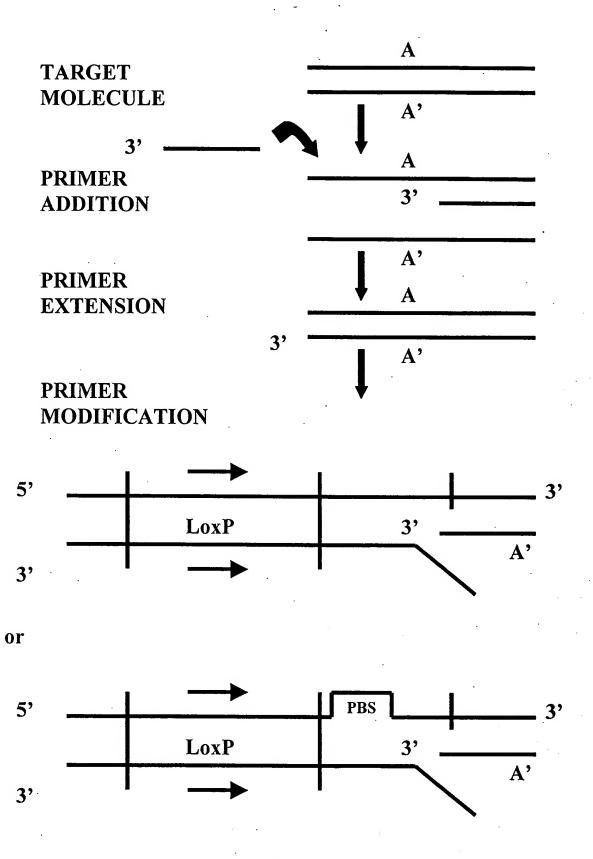
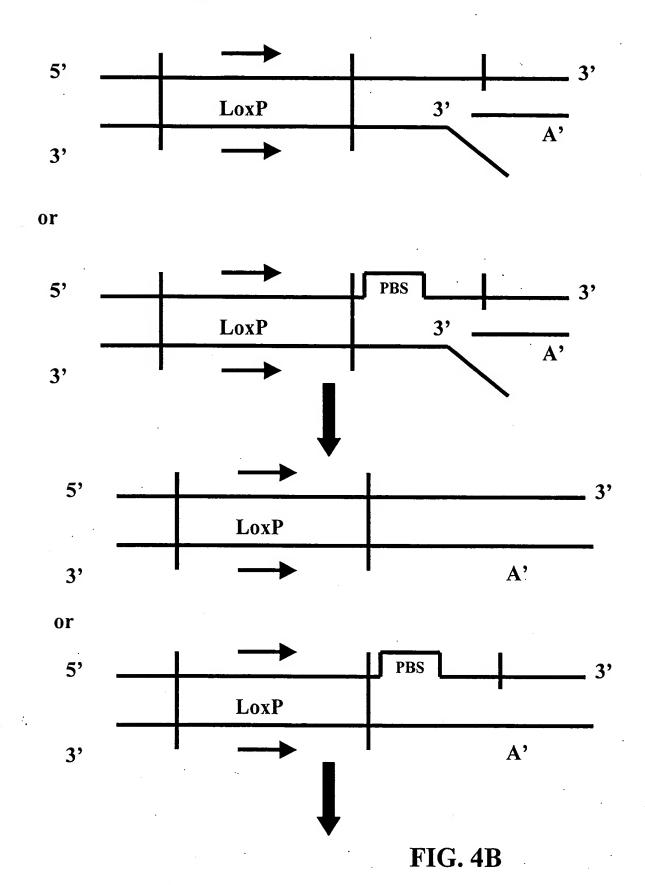


FIG. 4A

III.e. .N V...KU AMPLIFICATION OF NUCLEIC ACID
MOLECULES VIA CIRCULAR REPLICONS
Inventor: Jeffrey I. Auerbach
Express Mail No.: EV334229453US
Atty Docket No. INL-083CP6C5
Atty: Diana M. Steel
Figure 7 of 19



Tule: IN VITRO AMPLIFICATION OF NUCLEIC ACID MOLECULES VIA CIRCULAR REPLICONS Inventor: Jeffrey I. Auerbach Express Mail No.: EV334229453US Atty Docket No. INL-083CP6C5 Atty: Diana M. Steel Figure 8 of 19 5' 3' LoxP A' 3'  $\mathbf{or}$ 5' **PBS** LoxP A' 3' LoxP **MODIFICATION OF** 5' TERMINUS LoxP A LoxP LoxP A' or LoxP LoxP **A**'. FIG. 4C

Ittle: IN VITRO AMPLIFICATION OF NUCLEIC ACID MOLECULES VIA CIRCULAR REPLICONS Inventor: Jeffrey I. Auerbach Express Mail No.: EV334229453US

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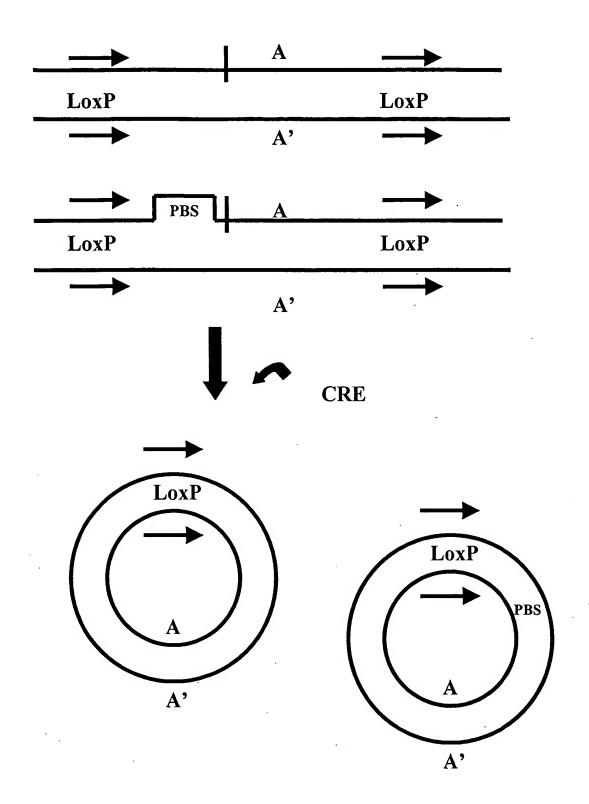


FIG. 4D

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X' **SPACER**  $\mathbf{X}$ A' 3' **HYBRIDIZATION SPACER** X' 3' X A' **POLYMERIZATION** A **SPACER** X'  $\mathbf{X}$ A' LoxP LoxP ADDITION

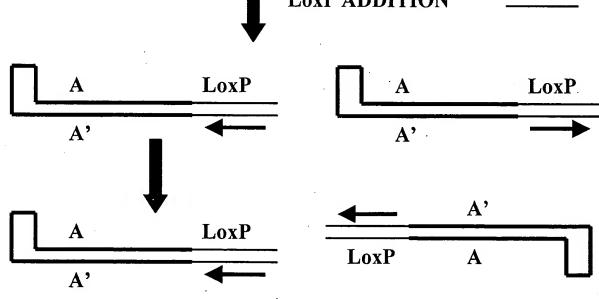
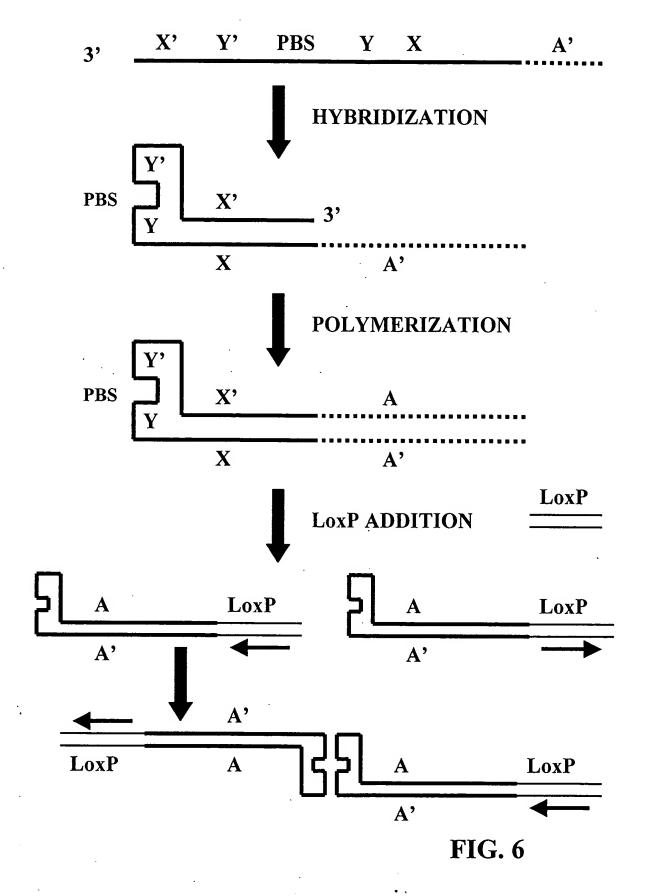


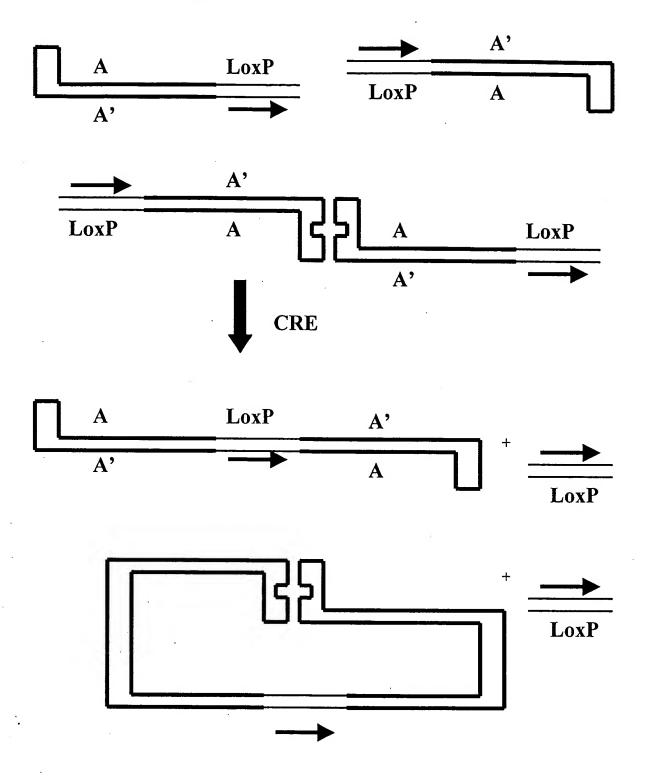
FIG. 5

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Express Mail No.: EV33422945311S
Atty Docket No. INL-083CP6C5
Atty: Diana M. Steel

Figure 11 of 19



Title: IN VITRO AMPLIFICATION OF NUCLEIC ACID MOLECULES VIA CIRCULAR REPLICUNS Inventor: Jeffrey I. Auerbach Express Mail No.: EV334229453US Atty Docket No. INL-083CP6C5 Atty: Diana M. Steel Figure 12 of 19



**FIG.** 7

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Atty: Diana M. Steel
Figure 13 of 19

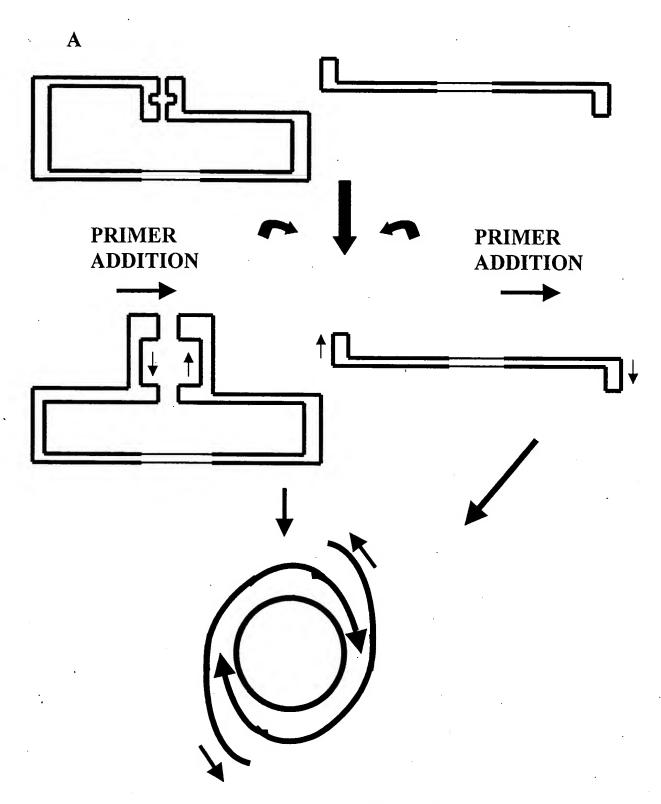
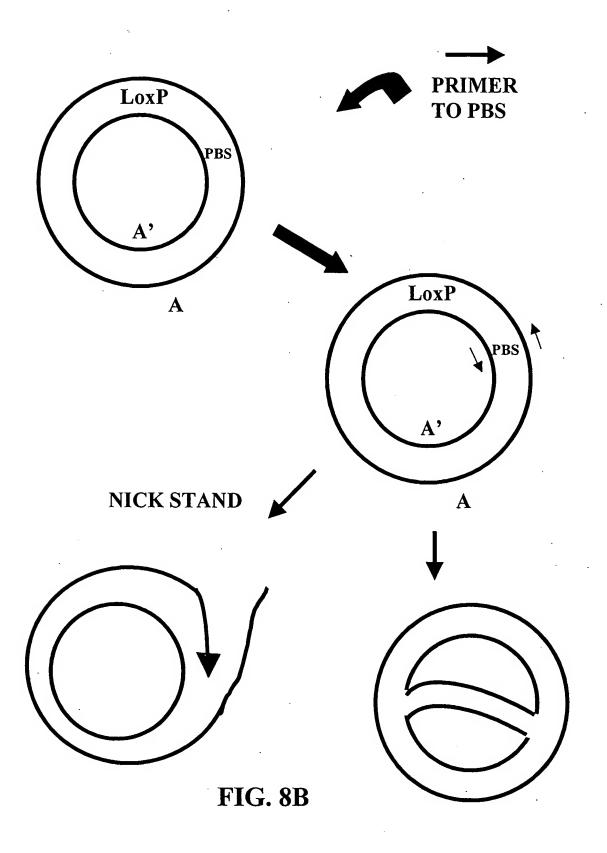
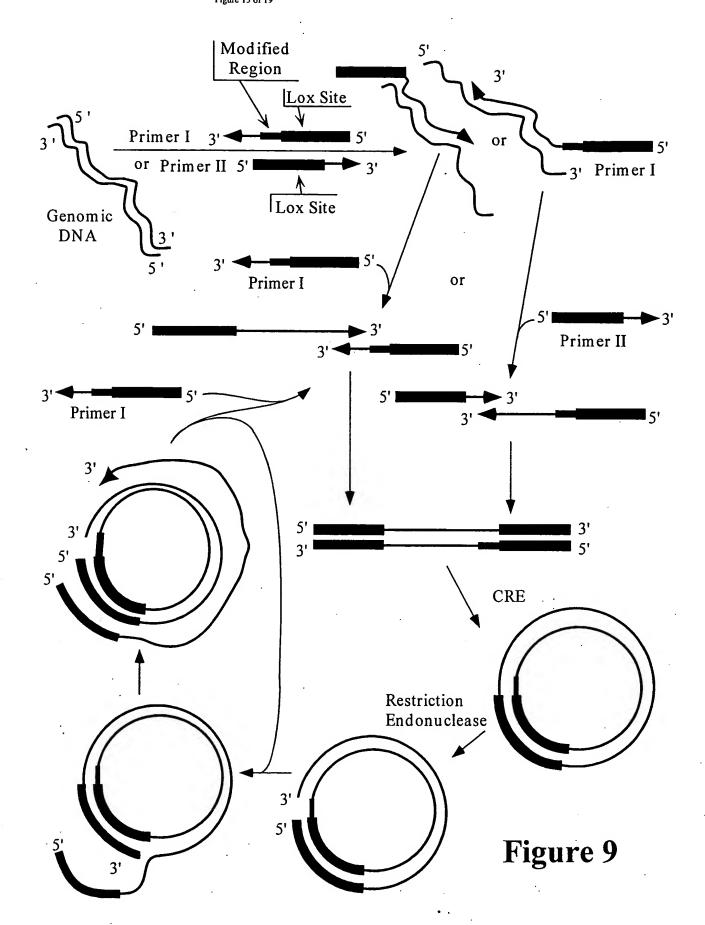


FIG. 8A

THE. IN VITRO AMPLIFICATION OF NUCLEIC ACID MOLECULES VIA CIRCULAR REPLICONS
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Atty Docket No. INL-083CP6C5
Atty: Diana M. Steel
Figure 14 of 19

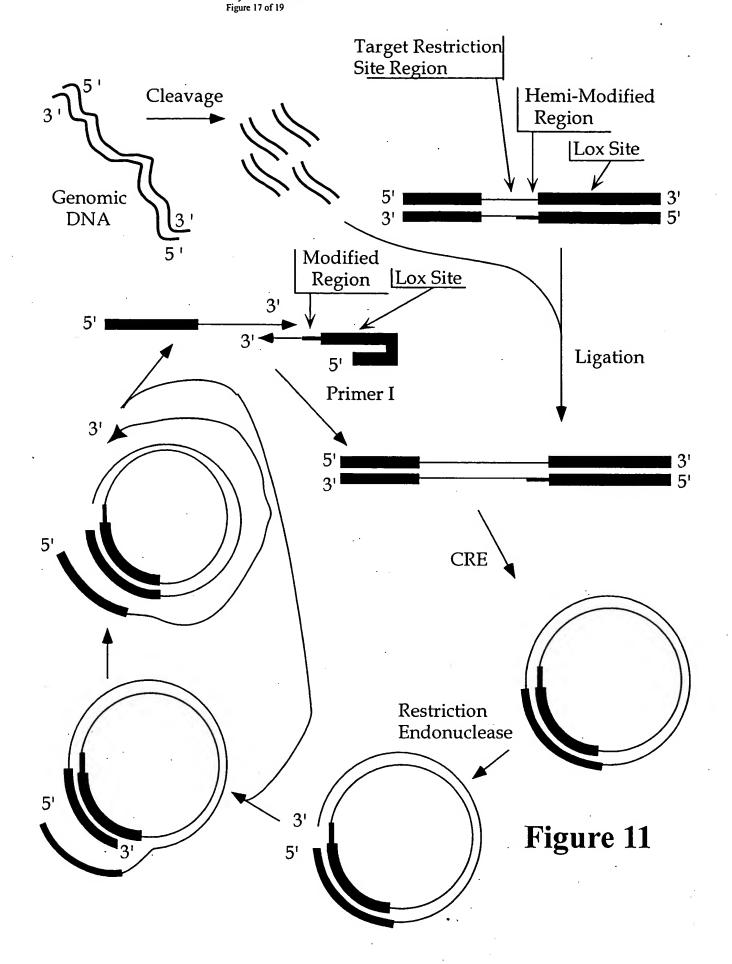


Title: IN VITRO AMPLIFICATION OF NUCLEIC ACID MOLECULES VIA CIRCULAR REPLICONS Inventor: Jeffrey I. Auerbach Express Mail No.: EV334229453US Atty Docket No. INL-083CP6C5 Atty: Diana M. Steel Figure 15 of 19

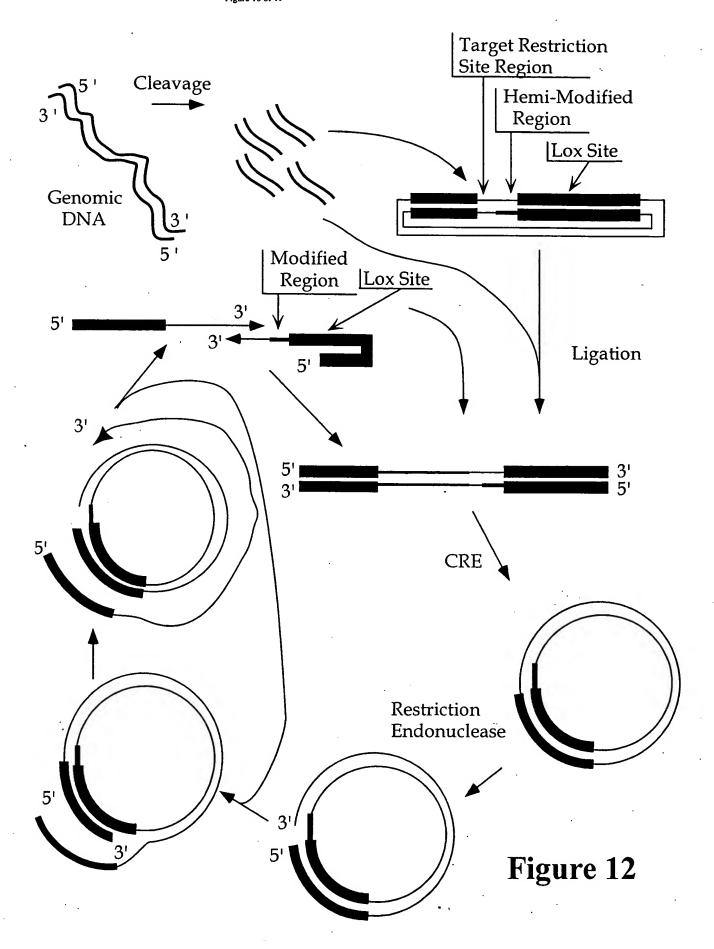


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Express Mail No.: EV334229453US
Atty Docket No. INL-083CP6C5
Atty: Diana M. Steel
Figure 16 of 19 Modified Region Lox Site Primer I or or Primer II -3' Primer I Lox Site Genomic DNA Primer I or 5' Primer II 3' Primer I 3' 🗡 5' | 3' <sup>|</sup> CRE Restriction Endonuclease Figure 10

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Express Mail No.: EV334229453US
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Atty: Diana M. Steel
Figure 18 of 19



Title. IN VITRO AMPLIFICATION OF NUCLEIC ACID MOLECULES VIA CIRCULAR REPLICONS Inventor: Jeffrey I. Auerbach Express Mail No.: EV334229453US Atty Docket No. INL-083CP6C5 Atty: Diana M. Steel Figure 19 of 19

